



PAARA, P.O. Box 911, Menlo Park, California 94026

May 1994

Volume 38

# PAARAGraphs Since 1937

Monthly Newsletter for the Palo Alto Radio Association

## PRESIDENT'S MESSAGE

**A**TTENTION PAARA GANG. This is the first issue of our new PAARAGraphs produced by Peter, KC6WCB, editor, and myself, N6PGM, publisher. We are quite excited about this adventure and we ask for your assistance. We need feedback, input, and helpful criticism. We want to open the publication to new types of articles including personal opinion, debates, history, humor, etc. I know there is a vast pool of untapped talent among our membership, and everyone loves to see his or her name in print, so come on gang, let's have some fun.

In addition we have two positions which need to be filled quickly; an advertising manager and an event photographer.

By the way, if you have not yet paid 1994 dues, this will be the absolute last issue of PAARAGraphs mailed to you.

---Continue on Page 3--

## PROFESSOR TWIGGS WILL BE OUR SPEAKER

This month, we have Professor Twiggs from Stanford University's Satellite Systems Development Lab, giving us a talk on new ham satellite developments. You will not want to miss this meeting. See you there on Friday, May 6th, at 7:30 PM at the Menlo Park Recreation Center. Before the meeting, we will have dinner with our speaker. This is open to all. It will be at 6:00 PM at Su Hong, El Camino, off Ravenswood in Menlo Park. Talk in at 145.23(-) PL100 and 147.45/simplex.



Interim Editor, Peter A. Berger,  
KC6WCB with Harmonic and  
Interim Publisher Lily Anne Hillis,  
N6PGM.

## ONE MORE ROUND OF THANKS TO N6VFH

From 1987 to 1994, PAARAGraphs was edited by Chuck Johnson, N6VFH. He did an outstanding job. What was largely a solo effort on his part will now have to be done by many. Those of us that have not yet thanked Chuck for his years of editorial effort should waste no time to personally thank him now. So one more time "Thank you N6VFH", and "LET'S NOT MISS THE NEXT CLUB MEETING". After all, you now have more free time.

## ANNOUNCEMENTS

**P**AARA ELMER PROGRAM. Hams that are interested in becoming instructors for the ELMER program should contact Koert

Koelman (KC6WCI), 2140 Lyon Avenue, Belmont, CA 94002.

## COMING EVENTS

**Livermore Swap Meet.** May 1, 1994, 7 AM to 12 noon at Las Positas College in Livermore. Talk in 147.045 from the west, 145.35 from the east. Contact Noel Anklam, KC6QZK, (510) 447-3857 eves.

**PAARA Club Meeting.** Friday, May 6, 1994. Menlo Park Recreation Center, 700 Alma Street, Menlo Park. 7:30 PM to 9:30 PM.

**Fresno Hamfest.** May 7-8, 1994, Riverland Park at Kingsburg, CA. Contact James Wakefield, AH6CO, 1333 N. Palm Avenue, Fresno CA 93728.

**Foothill Swap Meet.** May 14, 1994 at Foothill College, Los Altos 5 AM to 2 PM.

**PAARA Board Meeting.** Wednesday May 18th at 7:30 PM.

**PAARA Club Meeting.** Friday, June 3, 1994. Menlo Park Recreation Center, 700 Alma Street, Menlo Park. 7:30 PM to 9:30 PM.

**PAARA'S Spring Pot Luck Picnic.** June 4, 11 AM to 3 PM in Ron, W6VG, and Helga Panton's Menlo Park Home Garden.

**ARRL National Convention.** Arlington, Texas, June 10-12, 1994. Contact John Fleet, WA5OHG, Box 25028, Dallas, TXC 75225.

**ARRL Field Day.** June 25-26, 1994.

## REPORTERS NEEDED

If you have ever aspired to be a ham journalist then this is your chance. We would like articles, notes, and tips on any Ham related topic. We would like items that review

technology, tips on amateur radio operation, review of gear, human interest stories etc. Please mail them to our PAARAGraphs, P.O. Box 911, Menlo Park, CA 94026. Items can also be Faxed to (415) 364-0258. Send packet via Dan Curry at WB6STW@N0ARY. Also, talk to Dan about EMAIL access. We want to make it as easy as possible for you to have your items published.

## THANKS FROM BABE ANDREWS, W6GCG

**B**abe wrote us the following note: "Please include this in the next newsletter, if possible, that I appreciate the card signed by the members present at the last PAARA meeting. Also your kind note & card (with words of encouragement to B.G.) The present recovery is ahead of schedule due to my physical condition and exercise routine!"

TNX and CUL  
73 + 88

Babe Andrews"

## RESULTS FROM LAST MONTH'S SURVEY ON WHAT CLUB MEMBERS WOULD LIKE TO SEE IN THEIR PAARAGraphs NEWSLETTER.

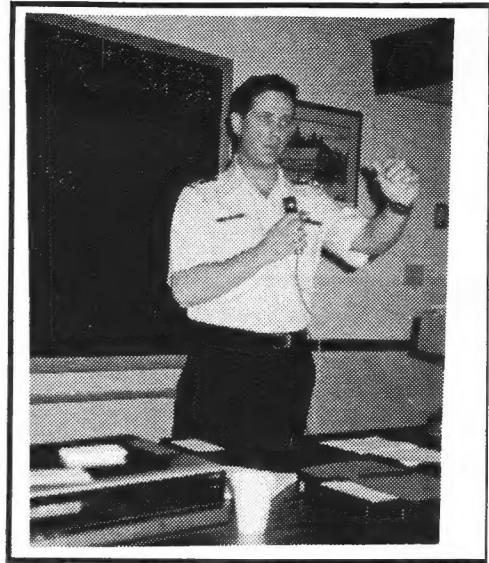
**A**t our April club meeting, we encouraged people to fill out a questionnaire on what they thought should be included in our PAARAGraphs Newsletter. The results indicate that club members would like a lot of useful information. The key areas of interest are in a variety of education articles, local announcements, and a reader feedback column. The number one item was "Education Articles on New Technology", while "How it was - Historical Section" took last place. It seems that members are very

pragmatic; they want to improve their technical skills, find out what is happening in the club and in the community, as well as being very interested in hearing what other members feel; also to be able to express their own opinions. The survey results ranked the following items:

1. Education Articles, New Technology.
2. Local Announcements
3. Reader Feedback Column
4. Education Articles, Current Technology
5. Local Announcements
6. Community Service - Upcoming & Recognition
7. Swap Shop Classified Section
8. Other Ham Club Announcements
9. Notes from the Board of Director's Meeting
10. General Meeting Notes from the Prior Month.
11. Repeater and Propagation Status
12. How it was - Historical Section

Several members expressed an interest in satellites, spread spectrum, packet, microwave, and fox hunting. There were several positive comments about having a swap shop classified section and a variety of other comments.

In conclusion, the message was that PAARAGraphs should provide local news about the club and about our community. It should be a vehicle for the sharing of information and it should provide us with general technical articles to refresh our memories and to update us on new developments. We all have areas of expertise that other people will find very informative. So, let's hear from you. Send your articles, notes, reader feedback, and classified items to PAARAGraphs, P.O. Box 911, Menlo Park, CA 94026, or FAX to (415) 364-0258, or send packet via Dan Curry at WB6STW@N0ARY.



Sean Salter, USCG Search & Rescue Helicopter Pilot

## REVIEW OF APRIL CLUB MEETING

by Steve Stuntz K6FS

**T**he Friday, April 1st club meeting was attended by over 60 eager hams - standing room only. This set a new attendance record for PAARA. (Glad the Menlo Park Fire Marshall was QRL elsewhere!). The speaker was Sean Salter, USCG Search & Rescue helicopter pilot (and Public Affairs Officer) CG Air Station, SFO. He showed videos of live and training rescue operations and described communications from air crew's point of view. Mobile backup on-site communications were discussed in detail by MS Bonnie Bennion, WA6ATS, Staff Communications Officer, USCG Auxiliary Flotilla 19. She stressed the importance of trained volunteer communicators in Coast Guard rescue work.

Incidentally, the WA6APZ repeater provides direct two-digit autodial emergency connect to the Coast Guard Rescue Control Center. For more information about this and other emergency access capabilities and the codes to use them, send a self addressed, stamped envelope along with a copy of your ham license to:

523 Repeater  
P.O. Box 391288  
Mt. View, CA 94039-391288

## FROM THE EDITOR'S DESK

*by Peter A. Berger, KC6WCB*

I would like to mention that I volunteered to be an interim editor for PAARAGraphs. Somehow the "interim" part seems to have been dropped in many conversations. Because of my irregular schedule, I am better suited for one-time project tasks rather than for on-going tasks. Therefore anyone that is interested in becoming the new Editor should hesitate no longer: talk to Lily Anne.

For this month's Editor's Desk topic, I believe that an important lesson about technology can be learned by looking at the COM3 port in an IBM PC type computer and whether it should be assigned IRQ4 or IRQ5. This issue became important to the publication of this newsletter because of the failure of a sensor on the laser printer that was going to print PAARAGraphs. While it was being serviced, a FAX machine was to handle some printouts and this necessitated the installation of a FAX/Modem board in the PC. Now Intel Corp. (both the FAX/Modem board and CPU manufacturer) recommended that IRQ5 be utilized when using COM3. After checking the PC system and verifying that IRQ5 was not being used by another board or subsystem, I went along with Intel's recommendation. But this was not to be the proper course of action. You see, a software driver was needed to format and send data. Fortunately, this driver was included with the FAX/Modem board. Unfortunately, as far as the software (Win FAX Lite) was concerned, IRQ4 was the only way to go when using COM3. In fact, the programmers of Win FAX thought that it was so ridiculous to think of COM3 on anything other than IRQ4, that the installation program would have it no

other way. Of course the system failed to function and the user had to "roll up the sleeves" to remedy the situation.

If you don't know what a COM or an IRQ is, that is OK. If fact, you should not have to know. Why should anyone other than the system designer have to deal with such issues? When you buy a car, it does not ask you for the dwell angle the first time you try to start the engine. Computers are becoming a larger part of the HAM scene. With enough effort, systems can be made to work. But for us to be productive, to be able to jump into packet, work some SAT, experiment with spread spectrum, try some slow scan TV or what have you; systems will need to be made easier to use. There is no technical reason for a user to be forced into dealing with low level IRQ lines when trying to print a newsletter. As system designers, lets put more effort into ease of use issues. As system users and buyers, don't settle for second rate products. By the way, what DMA channel would you recommend on COM3?

## PRESIDENT'S MESSAGE

*continued from page 1*

PAARA'S annual spring pot luck picnic will be held June 4, 11 AM to 3 PM in Ron, W6VG, and Helga Panton's glorious garden in Menlo Park. This is a perfect time to hang out with old friends and to get to know new members. Bring your own food to barbecue, or eat and drink from the club's coldcut tray and liquid refreshments. Members and guest are welcome. If you'd like to help with this event, contact me, N6PGM, or Gerry, WA6LNV. Congratulation and cheers to Babe Andrews, W6GCG, for accepting 16 inches of new piping around his heart. We're proud of you, Babe.

Due to the constraints of time and money we are exploring the possibility of a new room for the first Friday of the month PAARA meetings. We could meet in community centers, places of worship, banks, private

corporations, etc. We will need the facility from 7 PM (in order to set up for the 7:30 meeting) until 10 PM. If you know of such a place, please make the initial contact and then CALL Steven Barnett, KD6CNU, 415-592-3766 (but please be sure to CALL AFTER 10 AM).

See you at the May 6th meeting. The May board meeting will be on the 18th.

*DE LILY N6PGM*

## QRP OPERATIONS

*by Kyp - WZ6N*

In QRP operations, we always talk about low transmitter power - some guys even operate at powers as low as one milliwatt. Me? I run five watts - most of the time anyway. Recently however, I may have reached a new low in QRP operations. I have been operating at zero watts output. And since I have been running at reduced power, there have been changes: Problems with QRM, QRN and QSB have disappeared along with QSO and QSL. I don't have to QSY any more and I never even think about QRT let alone QRL or QSK. And QST? Gone! But I really don't notice that one so much since I never did QST anyway. RST and RFI are eliminated also, of course. As you can plainly see, there are lots of changes associated with running zero watts output. But - there is one thing that has not changed. Can you tell what it is?

*QRP guys don't say 73, they say 72...*

## Axioms from a DX Old Timer

*Rule 1.* The Science of DXing holds the answers to all the scientific questions of Amateur Radio.

*Rule 2.* Any amateur who does not believe Rule 1 is neither scientific nor a DXer.

*Rule 3.* Any evidence of intelligent operating in a DX contest is not scientifically sound.

*Rule 4.* Any person who believes or supports any sign of evidence of intelligent operating in a DX contest is not a scientist.

*Rule 5.* DXers know for a fact that DXing matters are all that matter.

*Rule 6.* Anything which is not about DXing does not matter.

-WA6AUD

## Two Meter Simplex Frequencies

For Simplex operation, it is important that you do not simply pick a quiet channel. You could interfere with other stations. So here are a few simplex frequencies from the 1993 ARRL Repeater Guide and the Spring 1994 Northern Amateur Relay Council of California Repeater Guide:

(in MHz)

146.415, 146.430, 146.445, 146.475, 146.490, 146.505, 146.520, 146.535, 146.550, 146.565, 146.595, 147.405, 147.420, 147.435, 147.450, 147.465, 147.480, 147.495, 147.510, 147.525, 147.540, 147.555, 147.570, 147.585.

## AMATEUR TIDBIT OF THE MONTH

from "The Heterodyne"

Your amateur call sign is made up of letters. All of the letters put together are not "call letters," they are your "call sign," often shortened to your "call." If you don't believe it, pull out your ham license (sometimes called your "ticket") and look where it says "call sign." ("Call letters" generally refers to broadcast radio and TV stations.)

## IDENTIFICATION TIPS

from "The Heterodyne"

When someone calls you on the radio, it's wise to answer with your own call sign, rather than stumbling over the unknown calling station's call sign.

Just plain "go ahead," while not illegal, can leave room for confusion if there are several stations on the air at the time. Saying the calling station's ID is no longer necessary, although you can say it if you know it. Generally speaking, you can't go wrong by answering with your own call sign.

## LETTERS TO THE EDITOR

by Peter A. Berger, KC6WCB

It was a damp day at the last Foothill flea market. A few sprinkles made for an interesting morning. It seemed that the added moisture make for more of a "Buyer's Market". Those sprinkles seemed to bring out an amazing degree of flexibility on the part of many sellers. Posted prices became not only damp, but also soft; and great buys were made by many savvy Hams.

Beyond the bargains, the flea market also became an insight on what sellers thought of their own wares. Did they protect it at "all costs" or did they get a "cup of hot coffee" while there was a lull in the action. A few sellers came prepared with canopies, but they were in the minority. Some sellers went to great lengths to protect their wares with whatever they could find, others went through the motions, while a few hearty sellers did nothing at all. From a buyers standpoint, you could really tell a lot about the probable state of the equipment. If the seller does not at least protect his 125 MHz scope or 250 MB hard drive from the weather, what other nasty hazards could this unfortunate piece of equipment have endured before you feasted your eyes upon it at the flea market. No matter the amount of assurances that the seller bestows upon you; I say that actions speak louder than words.

## HISTORICAL SECTION

by Steve Stuntz, K6FS

**S**peculative Trivia: In the olden days, before TTY and RTTY, news services sent their copy around the country by wire, using hand-sent American Morse code. The end of each item was signified by the group "30" - dit-dit-dit-dah-dit (3) dah (double-length dash = 0). With the advent of CW radio and International Morse, "30" was gradually transmogrified into SK - dit-dit-dit-dah-dit-dah ("end of message/end of item"). Now it's used as a single-character procedure sign, dit-dit-dit-dah-dit-dah, indicating "end of contact". Make sense? Comments? Rebuttal?

## PAARA SWAP SHOP

SANTEC HT 1200, 2 meter hand held with leather case, drop-in quick charger, 3 battery packs, PL, pad included but not installed. \$175 Steve K6FS

20 foot tower section, strong triangular construction. \$45 or best offer. Peter KC6WCB. Phone 415-368-8036.

Send your classified ads to PAARAGraphs, P.O. Box 911, Menlo Park, CA 94026. Send packet via Dan Curry at WB6STW@NOARY. This service is free of charge but it is limited to space available in the newsletter.

## LATEST COMPUTER VIRUSES

Important computer viruses news updates from the Amateur Radio News Service (ARNS) Bulletin 1/94.

*Ted Turner Virus:* Colorizes your monochrome monitor.

*Government Economist Virus:* Nothing works, but all your diagnostic software says everything is fine.

*Congressional Virus:* The computer locks up, screen splits, and messages appear on each half blaming the other side for the problem.

*Ollie North Virus:* Turns your printer into a document shredder.

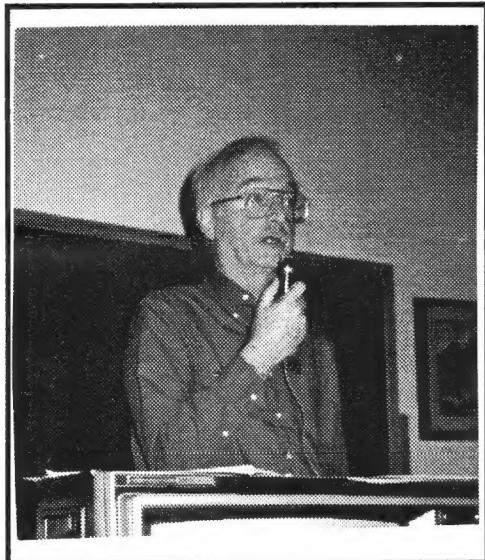
*Oprah Winfrey Virus:* Your 200 MB drive suddenly shrinks to 80 MB, then slowly expands back to 200.

*Texas Virus:* Makes sure that it's bigger than any other contiguous file.

*PBS Virus:* Stops whatever program is running on your PC every few minutes to ask for money.

*Oedipus Virus:* Your computer wants to marry its motherboard.

*Elvis Virus:* Your computer gets fat, slow, and lazy - then self destructs, only to resurface at shopping malls and service stations across rural America.



Brad Wyatt, K6WR, Speaks at our April PAARA Meeting.

## ARRL PACIFIC DIVISION MAY 1994 UPDATE

Last chance to Help Save the 13 cm. Band from NTIA's Plan: On April 7th, at a public Q&A meeting, NTIA made it very clear that their overwhelming concern was to free up 50 MHz of the Federal Government primary spectrum allocation immediately and to minimize the conversion costs

involved for the Federal Government, regardless of costs or problems caused to non-Federal Government entities. In their opinion, all other problems are to be resolved by FCC. These problems include sharing agreements with all other services, interference caused by the proposed reallocation to all parties, costs already spent by non-Federal Government services, to name only a few of the problems. With considerable effort, ARRL staff pried this information from NTIA at the meeting. NTIA's view appears to be "that unless you can prove us wrong, we have done our job based on OUR interpretation of the law passed in 1993".

ARRL has several actions underway to try to turn this situation around, but ALL depend on your documentation of current 2.3 GHz activity and plans.

ARRL needs hard documentation of current activity by ATV and any other operations at 2.3 GHz. There are a list of questions as a guideline for documentation and a four page NTIA report available from me. Just ask! The NTIA deadline is May 11. Write your comments to Mr. Norbert Schroeder, Program Manager, Spectrum Openness, NTIA, Room 4092, U.S. Dept. of Commerce, 14th & Constitution Ave., N.W., Washington, DC 20230. FAX: 202-482-4396. Please send a copy to Steve Mansfield, Legislative Affairs Mgr. in ARRL HQ. Do it today.

## VANITY "PREFERRED" CALLSIGNS

The ARRL Executive Committee adopted the recommendations of the Ad-Hoc committee of which I was one member. The basic outline for the Comments due to the FCC by the April 21 deadline, are as follows:

- All hams should be eligible to obtain preferred calls within the call sign blocks based on current license class (there are some exceptions). For example, this provision allows Extras to obtain 1X2 calls, but not Novices.

- A phase-in plan starts with those who have lost calls through the years for whatever reason and regardless of license class.

- Next would be Extra class licensees, then Advanced, and then open to all. Calls will be assigned based on availability within the current call areas.

- A one time fee should be charged for the preferred callsign rather than the \$7 per year enacted into law by Congress.

- Club call signs would also be issued.

Remember, this is a brief summary (there are many details) of what the ARRL is developing for its Comments. What the FCC will actually do is still to be seen.

The text of this docket starts on page 84 in February QST. Timing is unclear but could be as early as late 1994.

## PAARA'S ELMER LIST

**H**ere is the list of Elmers that will teach particular subjects. Contact the Elmers directly. At this time, no formal, PAARA-organized classes are planned. If you have any questions/additions, contact Koert Koelman (KC6WCI) at 415-593-5613 (home) or 510-271-7587 (work). Happy hamming!

Name:	Vic Black
Call:	AB6SO
Phone:	415-366-0636
QTH:	Redwood City
Instruction in: Access to QRP Resources	

Teach at Home:	No
Max. Students:	Any
Length:	Handouts

Name:	Bill Fies
Call:	K6TYO
Phone:	415-851-0312
QTH:	Portola Valley
Instruction in: Circuits RF & Analog	
Teach at Home:	Yes
Max. Students:	3
Length:	NA

Name:	Dick Finkbeiner	Length:	N/A	Instruction in: <b>Antennas, Technical Subjects</b>
Call:	W6AQL	Name:	Dick Kors	Teach at Home: Yes
Phone:	415-961-6655	Call:	KM6EP	Max. Students: 3
QTH:	Mountain View	Phone:	415-965-3766	Length: N/A
Instruction in: <b>Ham Exam Preparation</b>		QTH:	Mountain View	
Teach at Home: Yes		Instruction in: <b>Personal Computers, DOS/Windows</b>		Name: Gerry Tucker
Max. Students: 3		Teach at Home: No		Call: WA6LNV
Length: As Required		Max. Students: Any		Phone: 415-326-4908
Name: Joe Gomes		Length: 4, 1-Hours		QTH: Palo Alto
Call: KB6HDC		Name: Andy Korsak		Instruction in: <b>Non-RF Testing and Power Supply Repair</b>
Phone: 415-851-7029		Call: VE3FZK		Teach at Home: No
QTH: Portola Valley		Phone: 415-366-5228		Max. Students: Any
Instruction in: <b>PL Installation Icom 2AT</b>		QTH: Redwood City		Length: Open
Teach at Home: No		Instruction in: <b>Packet</b>		
Max. Students: Any		Teach at Home: Yes		
Length: 3-4 Hours		Max. Students: 2		
Name: Lars Karisson		Length: N/A		
Call: AA6IW		Name: Gill Lane		
Phone: 415-948-4588		Call: KJ6TF		
QTH: Los Altos Hills		Phone: 415-856-0154		
Instruction in: <b>Microwave</b>		QTH: Palo Alto		
Teach at Home: Yes		Instruction in: <b>RF Design</b>		
Max. Students: 2		<b>Construction &amp; Basic Radio Theory</b>		
Length: N/A		Teach at Home: Yes		
Name: Koert Koelman		Max. Students: Any		
Call: KC6WCI		Length: Open		
Phone: 415-593-5613		Name: Chris Rempel		
QTH: Belmont		Call: N6VZD		
Instruction in: <b>Packet, Wefax</b>		Phone: 415-573-1992		
Teach at Home: Yes		QTH: San Mateo		
Max. Students: 2				

**PAARA Palo Alto Amateur Radio Association, P.O. Box 911, Menlo Park, California 94026**

Club Meetings are held on the first Friday of each month at the Menlo Park Recreation Center 700 Alma Street, Menlo Park

The Club holds a Radio NET every Monday Evening on 147.45 MHz at 8:30 PM

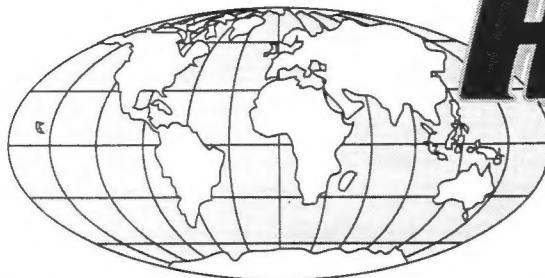
Membership in PAARA is \$6.00 per calendar year which includes a subscription to PAARAGraphs.

Make payment to the Palo Alto Amateur Radio Association, P.O. Box 911, Menlo Park, CA 94026

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## HANDHELDs



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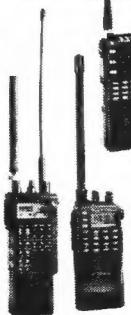
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## HANDHELDs



### IC-D1A

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IC-W2A/IC-X2A

IC-W21AT, 2M/440

IC-21A, 2 meter

IC-24AT, Duo Band

IC-2SRA, 2M + Wide Rx

IC-2GXAT, 2M

IC-T21A, 2M

NEW!

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## DR-600T



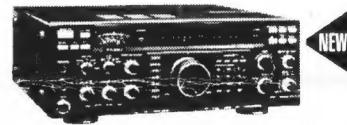
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## FT-990



NEW!

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## HANDHELDs



### TH-28A

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240 Mem.

w/optional mem. unit

UHF RX



### TH-22AT

Ultra Compact

2M HT, 5W optional

40 memories

Encode Built-In

**ICOM**

## IC-737



HF Transceiver

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**(800) 854-6046**  
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Lawrence Expwy.  
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